

**Invitation for Comment on the Candidates for the
Advisory Committee on EPA's Report on the Environment**

October 10, 2008

The EPA Science Advisory Board (SAB) Staff Office announced in a *Federal Register* Notice (Volume 73, Number 142, Pages 42801– 42802) that it was forming a committee to provide advice on future development of EPA's Report on the Environment (ROE). To form the committee, the SAB Staff Office sought public nominations of recognized experts from a wide range of scientific and engineering disciplines with experience and expertise in: designing, implementing, applying and/or communicating indicator information and data at regional and national scales to evaluate the condition of air, water, and/or land environments, human health, and/or ecological condition to inform planning, policy, and decision making. Background information on the project and details on the nomination process appeared in the cited notice. The notice is available on the SAB Website at www.epa.gov/sab/.

Based on qualifications and interest of the nominees, the SAB Staff Office identified a "Short List" of candidates. Brief biographical sketches of candidates on the "Short List" are listed below for comment. We hereby invite comments from members of the public to provide relevant information or other documentation that the SAB Staff Office should consider in determining who should serve on the Committee.

The SAB Staff Office Director makes the final decision about who will serve on the Committee based on all relevant information. In making that decision, the SAB Staff Office will complete its review of information regarding conflict of interest, possible appearance of lack of impartiality, and appropriate balance and breadth of expertise needed to address the charge. The SAB Staff Office will review all information provided by candidates, any information that the public may provide in response to the posting of information about the candidates on the SAB website, and information gathered by the SAB Staff independently on the background of the candidates.

Please provide any comments you may have with respect to the candidates, no later than October 31, 2008. Please make your comments to the attention of Dr. Thomas Armitage, Designated Federal Officer. Emailing comments (armitage.thomas@epa.gov) is the preferred mode of receipt.

Candidates for the Advisory Committee on EPA's Report on the Environment

Ahsan, Habibul

University of Chicago

Dr. Habibul Ahsan is a Professor in the Departments of Health Studies, Medicine and Human Genetics at The University of Chicago in Chicago, Illinois. He is also the Associate Director of Population Research and Director of Center for Cancer Epidemiology and Prevention at University of Chicago Comprehensive Cancer Center. He concurrently serves as a Professor of Clinical Epidemiology at Mailman School of Public Health, Columbia University, New York. In 1988, Dr. Ahsan received his M.D. in Medicine from the Institute of Post Graduate Medicine and Research at the University of Dhaka in Dhaka, Bangladesh. He then received his PGDip in International Health in 1990 and MMedSc in Public Health in 1992 from the University of Western Australia in Perth, Australia. Dr. Ahsan's research interests focus on environmental health including health effects of arsenic in drinking water, air pollution, and also on gene-environment interactions in cancer and other diseases. He has published nearly 150 scientific papers and obtained more than \$25 million federal grant funding (from the National Institutes of Health and the Department of Defense) as principal investigator to lead more than a dozen national and international studies on environmental epidemiology and gene-environment interactions in the health effects of arsenic and cancer. Dr. Ahsan has been chair and member of numerous national and international committees and currently serves on the editorial board of several international biomedical journals.

Allen, David T.

University of Texas

Dr. David Allen is the Gertz Professor of Chemical Engineering and the Director of the Center for Energy and Environmental Resources at the University of Texas at Austin. His research interests lie in environmental reaction engineering, particularly issues related to air quality and pollution prevention. He is the author of four books and over 125 papers in these areas. The quality of his research has been recognized by the National Science Foundation (through the Presidential Young Investigator Award), the AT&T Foundation (through an Industrial Ecology Fellowship) and the American Institute of Chemical Engineers (through the Cecil Award for contributions to environmental engineering). Dr. Allen was a lead investigator in one of the largest and most successful air quality studies ever undertaken: the Texas Air Quality Study. His current research is focused on using the results from that study to provide a sound scientific basis for air quality management in Texas. In addition, Dr. Allen is actively involved in developing Green Engineering educational materials for the chemical engineering curriculum. His most recent effort is a textbook on design of chemical processes and products, jointly developed with the U.S. EPA. Dr. Allen received his B.S. degree in Chemical Engineering, with distinction, from Cornell University in 1979. His M.S. and Ph.D. degrees in Chemical Engineering were awarded by the California Institute of Technology in 1981 and 1983. He has held visiting faculty appointments at the California Institute of Technology, the University of California, Santa Barbara, and the Department of Energy.

Anderson, Henry

Wisconsin Division of Public Health

Dr. Henry A. Anderson holds positions as the State Health Official, State Environmental and Occupational Disease Epidemiologist, and Chief Medical Officer in the Wisconsin Division of Public Health, Department of Health Services, and adjunct professorships at the University of Wisconsin-Madison, Department of Population Health Sciences, and the University of Wisconsin Institute for Environmental Studies, Center for Human Studies. His expertise includes public health; preventive, environmental, and occupational medicine; respiratory diseases; epidemiology; human health risk assessment; and risk communication. Active research interests include: environmental health indicators and disease surveillance, childhood asthma, lead poisoning, reproductive and endocrine health hazards of sport fish consumption, arsenic in drinking water, chemical and nuclear terrorism, occupational and environmental respiratory disease, occupational fatalities, and occupational injuries to youth. Dr. Anderson currently serves on the EPA Children's Health Protection Advisory Committee and as their liaison to the U.S. EPA SAB. He also serves on the U.S. EPA National Advisory Committee for Acute Exposure Guideline Levels for Hazardous Substances. He was chair of the Environmental Health Committee of the U.S. EPA Science Advisory Board, served on the U.S. EPA SAB Executive Committee and is past Chair of the Board of Scientific Councilors for the National Institute of Occupational Safety and Health. He has served on four National Academy of Sciences Committees including Toxicity Testing for Assessment of Environmental Agents. He was a founding member of the Agency for Toxic Substances and Disease Registry Board of Scientific Councilors (1988-1992). He served on the Presidential Advisory Board on Radiation Worker Compensation, the Armed Forces Epidemiology Board, the Hanford Human Health Effects Subcommittee, and the Centers for Disease Control and Prevention (CDC)/ National Center for Environmental Health Director's Advisory Committee. He is a fellow of the Collegium Ramazzini and the American Association for the Advancement of Science. He is associate editor of the American Journal of Industrial Medicine and serves on the editorial board of Cancer Prevention International. Dr. Anderson received his M.D. degree in 1972 from the University of Wisconsin-Madison. He was certified in 1977 by the American Board of Preventive Medicine with a sub-specialty in occupational and environmental medicine and in 1983 became a fellow of the American College of Epidemiology.

Bailar, John

University of Chicago

Dr. John C. Bailar III, M.D., Ph.D. (statistics) is Professor Emeritus at the University of Chicago and founding Chair of the Department of Health Studies there. For many years, his professional interests centered on the causes and prevention of disease. More recently he has focused on improving quality and performance in science generally. He was at the U.S. National Cancer Institute 1956-1980, Harvard University 1980-1988, and McGill University 1988-1995 before he went to Chicago. At present he is Scholar in Residence at the National Academies. He was a MacArthur Fellow 1990-1995. He has published widely in the statistics and epidemiology literature, including, recently, the health effects of air pollution. His areas of expertise include statistics, epidemiology and risk assessment. He has chaired over 20 National Academy committees and served on numerous others. He has also served as monitor of more than 20 Academy reports.

Becker, Richard

American Chemistry Council

Dr. Richard A. Becker earned a B.A. in Chemistry from Swarthmore College and a Ph.D. in Pharmacology and Toxicology from the University of California, and received post-doctoral training at the University of Toronto and the International Agency for Research on Cancer. He is a Diplomate of the American Board of Toxicology. He has served as toxicology study director for National Toxicology Program (NTP) and National Cancer Institute sponsored toxicity studies, and was a senior scientist with the State of California for more than 10 years. His experience in government service from 1987 to 1999 includes serving as both Deputy Director of Scientific Affairs and Director of the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment and as the Senior Toxicologist in the Department of Toxic Substances Control. In these positions, he focused on development of hazard evaluations, exposure assessments and risk characterizations to determine health and environmental threats posed by the release of hazardous substances into the environment. Since 1999, Dr. Becker has served as the Senior Director of the Public Health and Science Policy Team of the American Chemistry Council. He works as the organization's lead toxicologist in addressing emerging health risk science issues, including biomonitoring, sensitive subpopulations, advanced risk assessment techniques, endocrine screening and testing and alternative test methods. For the past three years he has served on the NTP's Scientific Advisory Committee for Alternative Animal Methods.

Benfield, Fred

Virginia Tech

Dr. E. F. (Fred) Benfield is Professor of Ecology and Associate Head in the Department of Biological Sciences at Virginia Polytechnic Institute & State University (Virginia Tech). He received his Ph.D. in Zoology at Virginia Tech in 1971 and has been employed there since earning the degree. His research specialty is in the area of ecosystem level responses of Appalachian Mountain streams to landscape disturbance. He is a Co-Principal Investigator for the Coweeta Hydrologic Laboratory National Science Foundation Long Term Ecological Research (LTER) site in western N.C. His present research efforts include investigating long-term recovery of ecosystem function by a stream draining a watershed that was clear-cut in 1976. He is also studying population, community, and ecosystem level responses of headwater streams draining watersheds that are being experimentally clear-cut but are left with riparian strips of different widths. He and colleagues just completed field work on a project investigating stream functional responses to mountain-top removal/valley fill coal extraction and is beginning a new project with colleagues involving evaluating whether restoration efforts result in returning stream function. He is also working on a new project involving ecosystems services provided by unionid mussel beds to streams. A continuing LTER regional project involves responses of streams to the conversion of historically agricultural land to residential/urban use. Dr. Benfield has also worked in pollution ecology, macroinvertebrate drift and production dynamics, aquatic insect toxicology, distribution and abundance of aquatic macroinvertebrates, and arthropod defensive behavior. He has designed and taught courses at Virginia Tech in the areas of ecology, freshwater ecology, general and invertebrate zoology. He has published over 65 peer reviewed scientific research articles and authored or coauthored numerous chapters in books, symposium proceedings, and edited volumes. He has served as Managing Editor and Associate Editor of the *Journal of the North American Benthological Society* and Associate Editor for Limnology and Hydrobiology of the *American Midland Naturalist*. He presently serves on the editorial board of the *Journal of the North American Benthological Society*. He has served as President, Executive Chair, Board of Trustees for the Endowment Chair, Annual Meeting Program Chair and various committees of North American Benthological Society. Dr. Benfield has served on National Science Foundation panels, reviewing the Long Term Ecological Research Program and the Ecosystems Program, and he has been a member of the National Science Foundation's Committee of Visitors. He has also served as a reviewer of the EPA's Environmental Biology Program. Dr. Benfield is a member of the Ecological Society of America, the International Society of Limnology, the North American Benthological Society, the Society of Sigma Xi, and the Virginia Academy of Science. He presently serves as a member of the Ecological Processes and Effects Committee of the EPA Science Advisory Board.

Buckley, Timothy

The Ohio State University

Dr. Timothy J. Buckley is an associate professor and Chair of the Division of Environmental Health Sciences at The Ohio State University (OSU) College of Public Health. Dr. Buckley received his Ph.D. in Environmental Science from Rutgers University (1991), a Masters of Health Science in Industrial Hygiene from the Johns Hopkins Bloomberg School of Public Health (1986), and B.S. in Chemistry from St. John's University (Collegeville, MN; 1981). Dr. Buckley is a certified industrial hygienist and has been elected to leadership positions among his professional associations including chair of the American Industrial Hygiene Association's Biological Monitoring Committee and Academic Counselor of the International Society of Exposure Analysis. Dr. Buckley has also been an active member of the American Conference of Governmental Industrial Hygienists (ACGIH) since 1986 and is currently a member of their TLV Committee. Dr. Buckley's research expertise is in human exposure assessment as applied in risk assessment and epidemiology. This expertise is formed from 22 years of diverse research experience spanning his doctoral work (5 years), followed by five years as a research scientist with EPA's National Exposure Research Lab, and another twelve years in academia. Prior to his move to OSU, Dr. Buckley was on the faculty at the Johns Hopkins Bloomberg School of Public Health for nine years. Throughout his research career, Dr. Buckley has focused on methods, measurements, and models for assessing human exposure to contaminants in the community and work environments as a basis for assessing the public health threat and developing strategies for prevention. Dr. Buckley's current research is focused on the impact of air pollution on susceptible populations including urban economically disadvantaged communities, inner-city asthmatic children, nursing mothers and their infants, and communities in close proximity to heavily trafficked urban arterials. He has published over fifty peer-reviewed research articles on these and other topics. Dr. Buckley served on the U.S. EPA's Science Advisory Board's (SAB) Exposure and Human Health Committee from 2001 to 2007, he has been an ad hoc member of the Board of Scientific Counselors (BOSC), he is a member of Centers for Disease Control and Prevention (CDC's) National Center for Injury Prevention and Control Initial Review Group, and he is an associate editor for *Environmental Health Perspectives*. While at Johns Hopkins he served on the Faculty Advisory Board for the Center for a Livable Future. During his tenure with the U.S. EPA, Dr. Buckley received awards for his role and efforts in the National Human Exposure Assessment Survey (NHEXAS) and the Lower Rio Grande Environmental Exposure Study. His published research was recognized in 1996 with a U.S. EPA Scientific and Technology Achievement Award and again in 1999 by the Walter G. Berl Award given by the Johns Hopkins Applied Physics Laboratory.

Burke, Ingrid

University of Wyoming

Dr. Ingrid C. Burke recently became Director of the Haub School and Ruckelshaus Institute of Environment and Natural Resources at the University of Wyoming. Prior to this position, she was a Professor, University Distinguished Teaching Scholar, and Co-Director of the Graduate Degree Program in Ecology at Colorado State University. Dr. Burke received a B.S. in Biology from Middlebury College (1980) and a Ph.D. in Botany from the University of Wyoming. Her research interests focus on: cross-continental studies of ecosystem ecology, the influences of land use management on net ecosystem production and carbon, nitrogen, and phosphorus storage; biogeochemical cycling in semiarid ecosystems at local to regional scales; soil carbon and nitrogen turnover; and nitrogen retention in soils. She has served on numerous scientific panels and committees including; the National Science Foundation Long Term Ecological Research Program Site Review Team, the National Academy of Sciences - National Research Council Committee on the Environmental Impacts of Wind Energy, the National Science Foundation Division of Environmental Biology Committee of Visitors, the National Academy of Sciences Environmental Studies and Toxicology Advisory Board, and the White House Committee on Ecological Index Sites, and the National Academy of Science - National Research Council EPA EMAP Review and Advisory panel. Dr. Burke presently serves on the editorial board of *Ecological Applications* and previously served on the editorial boards of *Ecosystems*, and *Forest Ecology and Management*. She is a member of the American Association for the Advancement of Science, the American Association of University Women, the American Geophysical Union, the American Institute of Biological Sciences, the American Society of Photogrammetry and Remote Sensing, the Association of Women in Science, the Ecological Society of America, Sigma Xi, and the Soil Science Society of America.

Chestnut, Lauraine

Stratus Consulting Inc.

Ms. Lauraine G. Chestnut is a managing economist at Stratus Consulting Inc. specializing in the quantification and monetary valuation of human health and environmental effects associated with environmental pollutants. She has an M.A. in economics from the University of Colorado, Boulder. Ms. Chestnut has over 20 years of experience with Stratus Consulting and its predecessors working for clients including the U.S. Environmental Protection Agency, California Air Resources Board, the National Park Service, Environment Canada, Health Canada, and The World Bank, quantifying and valuing the effects of air pollutants on including human health, visibility aesthetics, materials, and crops. She has conducted original economic and survey research to estimate the economic value to the public of protecting human health, visibility aesthetics, and cultural materials from the effects of air pollution; and has conducted epidemiology studies of the effects of particulate matter on human health. She has developed quantification models to estimate the benefits of reductions in air pollutants that have been used to assess provisions of the Clean Air Act in the U.S., proposed Canadian air quality standards, air quality standards in Bangkok, and elsewhere. Ms. Chestnut has numerous publications on these topics in peer reviewed journals including *Journal of Environmental Management*, *Archives of Environmental Health*, *Journal of the Air and Waste Management Association*, and *Journal of Policy Analysis and Management*. Ms. Chestnut is currently serving on the U.S. EPA, Clean Air Science Advisory Committee, NO_x and SO_x Secondary NAAQS Review Panel. She served in 2007-2008 on the National Research Council Committee on Mortality Risk Reduction Benefits from Decreasing Tropospheric Ozone Exposure. She also served on the U.S. EPA Science Advisory Board, Advisory Council on Clean Air Compliance Analysis and on the California Air Quality Advisory Committee. She was elected to the Board of Directors of the Association of Environmental and Resource Economists.

Cohen, Aaron

Health Effects Institute

Dr. Aaron J. Cohen is Principal Scientist at the Health Effects Institute (HEI) in Boston, MA, where he has been employed since 1990. At HEI he manages an international program of epidemiologic research on the health effects of air pollution, and is involved in scientific program development. Dr. Cohen has served since 1999 as a Temporary Advisor to the World Health Organization (WHO), and co-chaired the Working Group on Urban Outdoor Air Pollution that produced estimates of the global burden of disease due to outdoor air pollution for the WHO's *World Health Report 2002*. Dr. Cohen received his D.Sc. in Epidemiology (1991), and Masters in Public Health (1985) from the Boston University School of Public Health. He also is a Registered Respiratory Therapist (A.S. and B.S., Northeastern University), and worked as a therapist in newborn intensive care, and subsequently as Research Associate in Perinatal Epidemiology in the Joint Program in Neonatology at Brigham and Women's Hospital in Boston, where he conducted epidemiologic and clinical research on neonatal respiratory disease, and the evaluation of related medical technologies. Since 1994 Dr. Cohen has been an Adjunct Assistant Professor of Environmental Health at Boston University School of Public Health, where he lectures on environmental epidemiology.

Conquest, Loveday

University of Washington

Dr. Loveday Conquest is Professor of the School of Aquatic and Fishery Science and Director of the Quantitative Ecology and Resource Management Program, University of Washington. She holds a B.A. in Mathematics from Pomona College, an M.S. in Statistics from Stanford University, and a Ph.D. in Biostatistics from the University of Washington. Her research interests concern development of statistical methods for data analysis, sampling/field design, and general methodology to address problems in environmental monitoring and natural resource management. Dr. Conquest's research has included quantifying effects of large woody debris in stream habitat to enhance watershed management, effects of landscape disturbance (e.g., agriculture, urban development) on stream water quality, cost models for statistical designs for sampling in streams for habitat assessment, assessing effects of commercial fishing on protected seabirds in Puget Sound and Alaskan waters, sampling designs for the Gulf of Nicoya fishery in Costa Rica, and improvement of population estimates for aggregated populations. Other research interests include spatial sampling designs for long-term environmental monitoring projects and for landscape to regional scales, statistical power analyses for pollution studies, and statistical properties of Index of Biotic Integrity (IBI). Dr. Conquest has authored numerous peer reviewed publications and has served as Associate Editor of the journal *Biometrics*. Dr. Conquest served as Chair of the American Statistical Association's Section for Statistics and the Environment. She served on the National Research Council Committee to Review the U.S. Environmental Protection Agency's Environmental Monitoring and Assessment Program (EMAP), and she is a Fellow of the American Statistical Association.

Di Giulio, Richard

Duke University

Dr. Richard Di Giulio is Professor of Environmental Toxicology in the Nicholas School of the Environment at Duke University, Durham, North Carolina. At Duke, he also serves as Director of the Integrated Toxicology and Environmental Health Program (a doctoral and post-doctoral training program), Director of the Superfund Basic Research Center, and Director of the Center for Comparative Biology of Vulnerable Populations. He received a B.A. in comparative literature from the University of Texas at Austin, the M.S. in wildlife biology from Louisiana State University and his Ph.D. in environmental toxicology from Virginia Polytechnic Institute and State University. Dr. Di Giulio has published over 100 scientific research papers on subjects including biochemical and molecular mechanisms of adaptation and toxicity, biomarkers for chemical exposure and toxicity, and chemical contamination of sediments. Most of this work has employed aquatic organisms. Additionally, he has organized symposia and workshops and written on the broader subject of interconnections between human health and ecological integrity. Dr. Di Giulio has served as an advisor for the Science Advisory Board of the U.S. EPA, is a member of the Computational Toxicology Committee for the U.S. EPA Board of Scientific Counselors, and recently worked as a member of the National Academy of Science Committee on Assessment of the Health Implications of Exposure to Dioxin. He has served on the Board of Directors for the Society of Environmental Toxicology and Chemistry, is active in the Society of Toxicology, and is associate editor for *Environmental Health Perspectives*.

Duke, Clifford

Ecological Society of America

Dr. Clifford Duke joined the Ecological Society of America (ESA) as Director of Science Programs in January 2003. The Science Office originated with ESA's Sustainable Biosphere Initiative in 1992, and focuses on the application of ecological science to environmental problem solving. To that end, the Office works with ESA members, other professional societies, and public agencies to develop workshops and publications on a variety of topics related to ecosystem sustainability, global change and biodiversity. Before coming to ESA, Dr. Duke worked for 13 years in environmental consulting, managing preparation of environmental impact statements, and ecological risk assessments for Department of Defense and Department of Energy facilities nationwide. He also contributed to a variety of transportation projects, from the environmental impact statement for the breakup of the Conrail railroad, to the planning of a bicycle trail in Washington, D.C. Most recently, Dr. Duke ran the Arlington office of The Environmental Company, Inc., a firm headquartered in Charlottesville, VA. Trained as a marine ecologist, Dr. Duke received his Ph.D. in Botany from Duke University, studying with Dr. Joseph Ramus at Duke University Marine Laboratory. Duke also obtained an M.A. in Public Policy Science from Duke University's Institute of Public Policy. Following his graduate studies, he held postdoctoral positions at Northeastern University, Wellesley College, and the Harvard School of Public Health, before moving into the consulting field. Dr. Duke currently serves on the U.S. EPA's Board of Scientific Counselors and the Sustainable Rangelands Roundtable Steering Committee, and previously served on the Environment Domain Committee of the Key National Indicators Initiative (KNII).

Edstrom, Robert

Minnesota Department of Transportation

Dr. Robert Edstrom is the Minnesota Department of Transportation Chief Toxicologist. He has a Bachelor of Arts degree in biology from St. Cloud State University (1980), a Master of Science in environmental chemistry from the College of William and Mary (1982), and a Ph.D. in chemical oceanography from the School of Marine Science of the College of William and Mary (1989). Dr. Edstrom specialized in the analysis of organic chemicals in environmental samples. As Chief Toxicologist, Dr. Edstrom's research interest areas support the Department through studying the fate, effects, and migration of metals from transportation structures, the organics and metals in coal combustion by-products, de-icing chemicals, and new procedures for evaluating the environmental hazards from road construction materials. These material environmental hazard assessments include analysis of field monitoring data and using screening models to evaluate the life-cycle of virgin products as well as recycled and waste products used in road construction. Dr. Edstrom is also a panel member of the Transportation Research Board, NCHRP 20-05/Topic 40-01 synthesis panel for "Properties and Applications of Recycled Materials and Byproducts for Use as Construction Materials."

Ela, Wendell

University of Arizona

Dr. Wendell Ela is an Associate Professor of Chemical and Environmental Engineering, with a joint appointment in Civil Engineering and Engineering Mechanics at the University of Arizona, Tucson, AZ. He received a Ph.D. (1998) and M.S. in Environmental Engineering from Stanford University and a B.S. in Civil Engineering from Virginia Polytechnic Institute and State University. Dr. Ela's research focuses on identification, assessment and mitigation of emerging threats to the environment. These may arise from 'old' contaminants being concentrated or exposed in new ways, as illustrated by his work on assessing the impact of the recent increased flows of arsenic into non-hazardous landfills and the potential salting out of inland basins by increased importation and desalination of impaired quality waters. The increased use, concentration and uncontrolled disposal of 'new' contaminants (or newly recognized contaminants) pose environmental and human health threats and have motivated Dr. Ela's work on understanding the transformations, flowpaths, and potential controls of such environmental contaminants as NDMA, MTBE, endocrine disruptors, and various flame retardants (e.g., PBDE). He has organized several national workshops on emerging environmental threats that have convened key researchers and regulators to discuss the state of the science and regulation. He is the co-author of one of the most widely used university texts in environmental engineering and science, *Introduction to Environmental Engineering and Science*, (3rd ed.), 2008. His teaching concentrates on water, wastewater and hazardous waste treatment.

Freeman, Natalie

University of Florida

Dr. Natalie Freeman is Associate Professor and Interim Director of Environmental Health at the University of Florida at the College of Public Health and Health Professions. She received her Ph.D. from Rutgers University in psychobiology in 1976 and her M.P.H. in epidemiology and quantitative methods from the joint Robert Wood Johnson Medical School-Rutgers University program in public health in 1990. She was formerly a member of the faculty at Robert Wood Johnson Medical School and the School of Public Health of the University of Medicine and Dentistry of New Jersey and a member of the Environmental and Occupational Health Sciences Institute in Piscataway, New Jersey. Dr. Freeman's primary research area is residential exposure assessment with specific focus on children's non-dietary exposure to metals and pesticides, and factors contributing to childhood asthma. While much of her work has focused on house dust and its components as metrics of exposure, she has also collaborated in multi-media multi-pathway exposure research incorporating indoor and outdoor air, soil, house dust, drinking water, and food. The children's exposure studies have made use of a range of methods, including questionnaires, time/activity diaries, videotaped observations, and handled food as an indicator of food contamination, to characterize behaviors that may contribute to exposure. Studies in which she has participated have used the following indicators of exposure: urinary and blood biomarkers, environmental samples, toys, hand wipes and rinses. Field projects under Dr. Freeman's direction have included several longitudinal studies tracking children's exposure to pesticides and lead over periods ranging from two weeks to two years. Dr. Freeman has served as an advisor for several community-based and school-based asthma reduction programs in New Jersey, has served as an ad hoc member of U.S. EPA Scientific Review panels and is a member of the U.S. EPA Children's Health Protection Advisory Committee.

Griffiths, Jeffrey

Tufts University

Dr. Jeffrey Griffiths is currently Director of Global Health, in the public health program at Tufts University School of Medicine. He is Associate Professor of Public Health, Medicine, Nutrition, and Civil and Environmental Engineering at Tufts University, with a primary appointment in the Department of Public Health and Family Medicine at Tufts University School of Medicine. Clinically, he is an Associate Physician, Division of Geographic Medicine and Infectious Diseases, New England Medical Center; Physician, Department of Infectious Diseases, St. Elizabeth's Medical Center, and Consulting Physician, Divisions of Infectious Diseases, Carney Hospital and Quincy Hospital. He has served on numerous national committees or advisory groups including: the US EPA Science Advisory Board (Drinking Water Committee; 2006-current), the National Drinking Water Advisory Council of the U.S. EPA (1998-2000; 2001-2003; 2004-2006); the National Academies' Committee on Drinking Water Contaminants (1999-2001); and the Public Interest Advisory Forum of the American Water Works Association (1999-2001), Public Health Subgroup. Other service has included being the Federal representative for the National Association of People with AIDS (NAPWA) to the EPA Drinking Water Microbial Disinfection and Byproducts Committee, and a member of multiple National Institutes of Health (NIH) AIDS Clinical Trials Groups dealing with enteric infections. He is a 2008 American Society of Microbiology International Professor, and is co-editor of the Communicable Diseases section of the *International Encyclopedia of Public Health* (8th edition, published by Elsevier). His major research interests lie in the study of waterborne diseases (especially cryptosporidiosis) and their relationship to environmental factors; respiratory infections and their linkage to malnutrition and air pollution; and the development of an ultrastable measles vaccine for use where refrigeration is not present. Since 2001 he has worked to link Tufts University with universities in East Africa via educational and research collaborations. Funding for his work has principally been through grants from NIH, the Centers for Disease Control and Prevention (CDC), the U.S. EPA, and the Gates Foundation. He has conducted research in Bangladesh, Ecuador, Haiti, Kenya, Tanzania, and Uganda as well the U.S. Dr. Griffiths received his A.B. in Chemistry in 1977 from Harvard College, then an M.D. from Albert Einstein College of Medicine and a MPH&TM in Public Health and Tropical Medicine from Tulane University (both in 1982). He completed residencies in both Internal Medicine and Pediatrics at Yale-New Haven Hospital during 1982-1986. He completed two postdoctoral fellowships, as a Research Fellow in Tropical Public Health at Harvard School of Public Health in 1986-88, and then a Research and Clinical Fellow at Tufts-New England Medical Center from 1988-91 in Geographic Medicine and Infectious Disease. He received National Board of Medical Examiners certification in 1984. He received a Connecticut Licensure in Medicine, 1985; Massachusetts Licensure in Medicine, 1986; Diplomate, American Board of Internal Medicine (ABIM), 1987; Diplomate, American Board of Pediatrics, 1987; Government of Bangladesh Licensure in Medicine, 1989; Diplomate, Sub-specialty Board in Infectious Diseases, ABIM, 1992; and Certificate of Knowledge in Clinical Tropical Medicine and Travelers' Health, 2000.

Grossman, Dennis

The Nature Conservancy

Dr. Dennis H. Grossman is a Senior Policy Advisor for the International Government Relations Division of The Nature Conservancy and a Senior Scientist for the Conservation Biology Institute. He holds a B.S. in ecology from the University of Wisconsin (1976), an M.S. in Plant Ecology from the University of Wisconsin (1982), and a Ph.D. in Plant Ecology from the University of Hawaii (1991). Dr. Grossman managed an environmental consulting group, DGI, for 2 years and spent one year as the Principal Associate for Biodiversity Protection and Ecosystem Planning in the Environment and Natural Resources Division at Abt Associates. Before this, he served 7 years as the Vice President for Science at NatureServe. Prior to working at the NatureServe, Dr. Grossman was Chief Ecologist at The Nature Conservancy for 12 years following work as a Research Fellow at the Environment and Policy Institute of the East-West Center in Honolulu. Dr. Grossman has worked extensively with vegetation science, ecology, and conservation biology projects across the Upper Midwest, California, and Hawaii as well as in India and Indonesia. These projects include the inventory, data management and analysis, classification, mapping, conservation ranking and conservation planning for terrestrial, freshwater and coastal-marine communities. Dr. Grossman was a principal developer of the National Vegetation Classification System for the United States that is currently endorsed as an inter-agency standard by the Federal Geographic Data Committee. He has published numerous articles on ecological classification and conservation and currently manages numerous projects associated with the implementation of these methods. Dr. Grossman is a member of the Ecological Society of America (ESA) and the Society for Conservation Biology, and serves Vegetation Subcommittee of the Federal Geographic Data Committee and on the executive committee of the ESA Panel for Vegetation Classification.

Halden, Rolf

Arizona State University

Dr. Rolf U. Halden, P.E., is Specialty Area Coordinator for Water Resources and Environmental Engineering at Arizona State University. He received his M.S. in Biology (1992) from the Technical University of Braunschweig, Germany, and his M.S. (1994) and Ph.D. (1997) in Civil/Environmental Engineering from the University of Minnesota. In January of 2008 Dr. Halden joined The Biodesign Institute at Arizona State University at the rank of Associate Professor. His tenure home is in the Department of Civil and Environmental Engineering. He also maintains an Adjunct Associate Professor appointment in the Department of Environmental Health Sciences at the Johns Hopkins University, where he served from 2001 to 2007 as a co-founding member of the Center for Water and Health. Prior to joining academia, he was post-doctoral fellow (1997) and project engineer (1998 - 2001) at the Lawrence Livermore National Laboratory. Dr. Halden's expertise is in the area of environmental microbiology, water and wastewater treatment, green chemistry and sustainability. His research explores the impact of anthropogenic activities on environmental quality and human health. Many of his publications deal with the occurrence of persistent organic pollutants in the environment, routes of human exposure, and the determination of body burdens and adverse health outcomes, particularly in children. Dr. Halden has served in the past on various advisory committees and panels. He co-authored a technical report for the Pew Charitable Trusts (2005 - 2007) on environmental impacts from industrial food animal production, served as a member of National Research Council of the National Academies (2006 - 2007) to help examine environmental monitoring and cleanup activities at the Los Alamos National Laboratory, provided expert advice to the U.S. EPA Office of the Inspector General – Office of Program Evaluation, for the Evaluation of Drinking Water Laboratory Procedures (2006), served as an expert consultant for the Food And Drug Administration (FDA) as a voting member of the Center for Drug Evaluation and Research (CDER) Nonprescription Drugs Advisory Committee (2005), and served as a Governor-appointed public interest member on the Maryland State Water Quality Advisory Committee (2003 - 2005). Dr. Halden also served as a conference organizer, steering committee member, panel member or session chair for various scientific symposia, including the Superfund Basic Research Program Annual Conference (2007, 2008), the Pacific Southwest Organic Residuals Symposium (2008), and the International Conference on Safe Water (2005). He is a member of various professional societies, including the American Chemical Society, the American Society for Microbiology, the American Society of Civil Engineers, and the Society of Environmental Toxicology and Chemistry.

Hawkins, Charles

Utah State University

Dr. Charles Hawkins is Professor of Aquatic Ecology in the Department of Watershed Sciences and Director of the Western Center for Monitoring and Assessment of Freshwater Ecosystems at Utah State University. Dr. Hawkins has been on the faculty of Utah State University since 1983 following completion of his Ph.D. in Entomology at Oregon State University. He teaches courses in general ecology, stream ecology, water quality, and professionalism in the life sciences. His research focuses on the ecology and management of freshwater ecosystems with special emphasis on sampling designs and statistical methods applicable to ecological research, biological monitoring, and conservation; predictive modeling of community composition; use of aquatic biota to assess and monitor ecological integrity; cumulative effects of watershed alteration on the physical, chemical, and biotic condition of aquatic and riparian ecosystems; and the biology and ecology of freshwater invertebrates, amphibians, and fishes. Over the last 15 years, Dr. Hawkins has worked extensively with state and federal agencies to develop and evaluate scientifically defensible biological indicators and criteria for freshwater ecosystems. His research has been supported by grants from the National Science Foundation, U.S. EPA, the U.S. Forest Service, and the US Geological Survey. He has served on the editorial board of the *Journal of the North American Benthological Society* and served a 4-year term as Vice-Chair and Chair of the Aquatic Ecology section of the Ecological Society of America. He served two terms (2001-2005) on the Ecological Processes and Effects Committee of the EPA's Science Advisory Board and serves on the Community Condition Indicators Committee for the H. John Heinz III Center for Science, Economics and the Environment.

Hopke, Philip

Clarkson University

Dr. Philip K. Hopke is the Bayard D. Clarkson Distinguished Professor at Clarkson University and the director of the Center for Air Resources Engineering and Science. Professor Hopke is a past president of the American Association for Aerosol Research and was a member of the National Research Council's congressionally mandated Committee on Research Priorities for Airborne Particulate Matter and the Committee on Air Quality Management in the United States. He was a member of the National Research Council's U.S. Committee on Energy Futures and Air Pollution in Urban China and the United States. Professor Hopke received his B.S. in Chemistry from Trinity College (Hartford) and his M.A. and Ph.D. degrees in chemistry from Princeton University. After a post-doctoral appointment at M.I.T., he spent four years as an assistant professor at the State University College at Fredonia, N.Y. Dr. Hopke then joined the University of Illinois at Urbana-Champaign and subsequently came to Clarkson in 1989 as the Robert A. Plane Professor with a principal appointment in the Department of Chemistry. He has served as dean of the Graduate School, chair of the Department of Chemistry, and head of the Division of Chemical and Physical Sciences before he moved his principal appointment to the Department of Chemical Engineering in 2000.

Kleinman, Michael T.

University of California, Irvine

Dr. Michael T. Kleinman is a Professor of Occupational and Environmental Medicine in the Department of Medicine at the University of California, Irvine (UCI), where he has been since 1982. He was previously employed by the U.S. Atomic Energy Commission (AEC) as an environmental scientist and he directed the Aerosol Exposure and Analytical Laboratory at Rancho Los Amigos Hospital in Downey, CA. He is a toxicologist and has been studying the health effects of exposures to environmental contaminants 40 years. He holds a M.S. in Chemistry (Biochemistry) from the Polytechnic Institute of Brooklyn and a Ph.D. in Environmental Health Sciences from New York University. He is also the Co-Director of the Air Pollution Health Effects Laboratory in the Department of Medicine at University of California, Irvine and a member of the UCI Radiation Safety Committee. He has published more than 100 articles in peer-reviewed journals dealing with environmental contaminants and their effects on cardiopulmonary and immunological systems and on global and regional distribution of environmental contaminants including heavy metals and radioactive contaminants from nuclear weapons testing and manufacture. He has directed more than 50 controlled exposure studies of human volunteers and laboratory animals to ozone and other photochemical oxidants, carbon monoxide, ambient particulate matter and laboratory-generated aerosols containing chemically or biologically reactive metals such as lead, cadmium, iron and manganese. He recently served on two National Academy committees to examine issues in protecting deployed U.S. Forces from the effects of chemical and biological weapons. Dr. Kleinman's current research focuses on neurological and cardiopulmonary effects of inhaled particles, including nanomaterials and ultrafine, fine and coarse ambient particles in humans and laboratory animals. His studies use radioactive and fluorescent tracers to measure kinetics of uptake, distribution, and retention of inhaled contaminants. His recent health effects studies have demonstrated that inhalation of combustion-generated particles can promote airway allergies and accelerate the development of cardiovascular disease and that these effects may be associated with organic and elemental carbon components of the ultrafine fraction of the ambient aerosol. His studies have also demonstrated that inhalation of ambient particles is associated with persistent inflammation in the brain and that particles associated with manganese can alter dopamine and serotonin levels in the brain and can cause changes in nerve structure during brain development. Dr. Kleinman has previously served on the U.S. EPA Clean Air Scientific Advisory Committee (CASAC) Ozone panel and currently serves as the Chair of the California Air Quality Advisory Committee.

Knobeloch, Lynda

Wisconsin Department of Health and Family Services

Dr. Lynda Knobeloch is a senior research scientist with the Wisconsin Department of Health Services' Bureau of Environmental and Occupational Health. In addition, she is an adjunct professor at the Center for Molecular and Environmental Toxicology at the University of Wisconsin-Madison. Dr. Knobeloch earned a B.S. in medical technology and Ph.D. in environmental toxicology at the University of Wisconsin-Madison. She works closely with the Wisconsin Department of Natural Resources' air management and drinking water quality programs and has developed health-based groundwater protection standards for more than 50 chemicals. Her research interests are in the fields of human exposure assessment; the health effects of low level, chronic exposure to environmental contaminants; and public health surveillance. Between 2000 and 2002 she conducted a large health study in a community impacted by arsenic-contaminated groundwater. Between 2004 and 2005 she conducted a study that assessed fish consumption and methylmercury exposure among more than 2,000 Wisconsin residents. She has authored numerous articles on environmental causes of human disease. Dr. Knobeloch was a member of the National Research Council Committee on the Toxicological Effects of Methylmercury. She is a current member of the U.S. EPA Science Advisory Board Homeland Security Advisory Committee (HSAC).

Knuteson, James

Flux Experts, LLC

Dr. James Knuteson is owner of Flux Experts, LLC, an environmental fate and transport modeling company. He received a Ph.D. in soil science, geochemistry, and agricultural economics from North Dakota State University, a M.S. in natural resource management (soil science) from the University of Wisconsin-Stevens Point, and a B.S. in forestry and soil science from the University of Wisconsin-Stevens Point. Dr. Knuteson's areas of interest include environmental dissipation studies for pesticides and other hazardous compounds. He has specialized in agricultural air emissions and bystander exposure, groundwater contamination potential and remediation, and aquatic ecosystem studies. Dr. Knuteson has held positions as senior scientist at Dow Agrosiences, research associate at the University of Minnesota, associate soil scientist, instructor, and research associate at North Dakota State University, and soil and water district conservationist for Monroe County, Wisconsin. In 2007 Dr. Knuteson was invited by U.S. Department of Agriculture/Agricultural Research Service to serve on an external expert panel to review selected research proposals related to the study of soil fumigants and air emissions.

Lambert, George

Robert Wood Johnson Medical School/ University of Medicine and Dentistry of New Jersey (UMDNJ)

Dr. George Lambert is an Associate Professor of Pediatrics and Director of the National Institutes of Health (NIH)/U.S. EPA Center for Childhood Neurotoxicology and Exposure Assessment, and Director of the Pediatric Clinical Research Center at the UMDNJ-Robert Wood Johnson Medical School, UMDNJ & Rutgers University. He holds a M.D. degree from the University of Illinois and has had post graduate training in Clinical Research in Neonatology. He was a Pediatric Intern and Resident at the Johns Hopkins Hospital, Baltimore, Md. He was also a Pharmacology Fellow at Children's Hospital of Philadelphia, PA, and a research associate in molecular pharmacology at the NIH. Dr. Lambert is certified by the American Board of Pediatrics, 1979 and 1980; Neonatal/Perinatal Medicine, 1980; and as an Instructor, Neonatal Resuscitation, 1989, UMDNJ-Robert Wood Johnson Medical School. He is an Adjunct Associate Professor of Pharmacy in the School Pharmacy of Rutgers, The State University of New Jersey. He is also a member of the Cancer Institute of New Jersey; Director of the Center for Child and Reproductive Environmental Health; Director, NIH / U.S. EPA Center for Childhood Neurotoxicology and Exposure Assessment; and the Director, Pediatric Clinical Research Center, UMDNJ- Robert Wood Johnson Medical School. Dr. Lambert has served as a consulting expert to a number of professional and governmental organizations including: the Neuropharmacology Division of FDA; the U.S. Congress; TSCA Interagency Testing Committee; Department of Energy, Oakridge National Laboratory, Division of Chemical Assessment; Office of Orphan Products Development, FDA; NICHD's National Neonatal Collaborative Project; and the National Academy of Sciences. He was a Member of the Committee on Drugs, American Academy of Pediatrics, (National Committee); Chairman - Human Health Effects Committee of the Joint (U.S. and Canadian) Commission on the Great Lakes; and a consultant to the World Health Organization. He has served on a number of U.S. EPA Science Advisory Board panels including the Dioxin Reassessment Panel. Dr. Lambert's research has focused on the effects of environmental chemicals on human organ maturation, reproductive function, growth and development, and neurobehavioral function.

Legge, Allan

Biosphere Solutions

Dr. Allan Legge is currently President of Biosphere Solutions, an environmental consulting firm located in Calgary, Alberta, Canada. Prior to forming Biosphere Solutions in 1993, he was a Senior Research Scientist at the Kananaskis Center for Environmental Research at the University of Calgary from 1972 to 1990, and a Senior Research Officer in the Environmental Research and Engineering Department, Alberta Research Council from 1990 to 1993. Dr. Legge holds a B.A. in Biology and Dramatic Arts which was received from Whitman College, Walla Walla, Washington in 1965, and a Ph.D. in Plant Genetics/Ecology from Oregon State University in Corvallis, Oregon in 1971. His areas of specialization are environmental toxicology/atmospheric chemistry, and he focuses on the evaluation and assessment of the effects of the air pollutants SO₂, O₃, H₂S, NO_x, HF, PM, and saline aerosols on forests and agricultural ecosystems. Dr. Legge has served on the following U.S. EPA Science Advisory Board committees and panels since 1985: (1) Forest Effects Review Panel (Co-Chair), 1985; (2) Scientific and Technological Achievement Awards Subcommittee (STAA), intermittently from 1986 to 2002. He has also served on the U.S. EPA Clean Air Scientific Advisory Committee (CASAC) as a consultant since 1994 on review panels dealing with Nitrogen Oxides, Ozone and Related Photochemical Oxidants, and Particulate Matter. He served as a member of the U.S. National Research Council Committee to Assess the North American Research Strategy on Tropospheric Ozone (NARSTO) from 1997 to 2000. Dr. Legge is an active member of the Air and Waste Management Association (AWMA), the Alberta Society for Professional Biologists, and the International Air Pollution Workshop. He was elected as a Fellow of the American Association for the Advancement of Science (AAAS) in 1992, and a Fellow of the AWMA in 2002.

Mogolesko, Fred

Environmental Technology Consultant

Dr. Fred Mogolesko recently retired as a Senior Project Manager for the Entergy Corporation and is currently a private environmental/technology consultant. At the Entergy Corporation he managed six major projects in the last decade that had an implemented value exceeding \$100M. Each of these major projects was optimized through careful consideration and evaluation of risk/benefit scenarios reflecting uncertainty. He has an earned Ph.D. and M.S. from New York University in Oceanography and Meteorology, and a M.S. and B.S. from the Polytechnic Institute of Brooklyn in Aerospace Engineering and Applied Mechanics. Dr. Mogolesko has had responsibilities for circulation and dispersion modeling for the ocean and atmosphere with specific emphasis on sea breeze/land breeze scenarios. He has assessed and published results associated with the deterministic and probabilistic aspects of the probable maximum hurricane event and has evaluated emergency planning scenarios using the U.S. Department of Energy's (DOE) MACCS2 code. He has had responsibility for probabilistic risk assessments, and has assessed various dispersion models developed by EPA and DOE for Emergency Planning needs. As a consultant, he developed early guidance for wind energy projects sponsored by the Solar Energy Research Institute. Dr. Mogolesko is a Certified Consulting Meteorologist under the sponsorship of the American Meteorological Society. In addition, he is a member of the DOE's Meteorological Coordinating Council and is a participant in the State of Massachusetts assessment of the nuclear technology option where his environmental and risk assessment expertise will serve an important functional role. He was Chairman of a Nuclear Energy Institute Task Force charged with reviewing the state-of-the-art for atmospheric dispersion models. Dr. Mogolesko was a peer reviewer for EPA's Industrial Source Complex Dispersion Model and the Sampled Chronological Model. In addition, Dr. Mogolesko participated in DOE atmospheric dispersion modeling workshops. He was an Associate Editor for the *Journal of Applied Meteorology* and Chairman of the BWROG's Committee on Instrument Uncertainty.

Murphy, Eileen

New Jersey Department of Environmental Protection

Dr. Eileen Murphy is the Director of the New Jersey Department of Environmental Protection's (NJDEP) Division of Science, Research and Technology. Before becoming Director in 2004, she served as Assistant Director for four years and as a research scientist for 11 years within the Division's primary scientific research and technical support unit. Dr. Murphy's specific scientific expertise is in the area of environmental contaminant transport as it relates to the vulnerability of drinking water contamination. She has investigated the issue of sources of lead in school drinking water, sources of mercury in private wells in southern New Jersey and of arsenic in northern New Jersey. She is currently conducting studies to examine the impacts of unregulated contaminants in drinking water supplies throughout the state. Recently, she served as the Department chair of the NJDEP Chromium Work Group. This group examined the current state of the science upon which the soil clean-up criteria for chromium is based in New Jersey. Before coming to DEP, Dr. Murphy served as Assistant Director for the Douglass Project for Rutgers Women in Math and Science, and as a Project Manager for the Center for Math, Science and Computer Education at Rutgers University. Dr. Murphy has a Ph.D. in Environmental Science from Rutgers University and a Masters of Science degree in Outdoor Education from Northern Illinois University. She earned a B.S. from the University of Notre Dame.

Neher, Deborah

University of Vermont

Dr. Deborah A. Neher is a soil ecologist and agroecologist. She currently holds the rank of chairperson and professor in the Department of Plant and Soil Science at University of Vermont. Dr. Neher has primary research interests in development of invertebrate bioindicators for environmental monitoring of terrestrial soils. Her approach is quantitative and ecosystem level in perspective, linking communities with ecosystem functions of decomposition and nutrient cycling. Her focus is on soil nematodes, collembolans and mites for implementation on regional and national scales. Dr. Neher holds a Ph.D. in Plant Pathology, M.S. in Plant Ecology, and served as a member of the Agricultural Lands component of Environmental Monitoring and Assessment Program from 1990-1996. She has held positions of Associate Editor (1999-2000) and Editor of *Ecology* (2002-2004) for the *Journal of Nematology*, and member of the Ecology Committee for the Society of Nematologists. Previously, she served as an associate editor for *Plant Disease* (1994-1996). For the American Phytopathological Society, she served as a member (1994-1997) and chair (1995-1996) of the Epidemiology Committee and as a member of the Nematology Committee (1997-2000). She has been active in the Soil Ecology Society since 1993, serving as society Secretary from 1996-1997. She has been instrumental in increasing the visibility of both soils and agriculture in the Ecological Society of America by initiating the Soil Ecology and Agroecology sections in the Ecological Society of America and serving as the first section chair of Soil Ecology in 1993-1995. Furthermore, she served on the Advisory Board for the Ecosystem Services Community Project, sponsored jointly by the Ecological Society of America and Union of Concerned Scientists from 2000-2001, and on the Board of Directors for the H. A. Wallace Institute for Alternative Agriculture from 1997-1999. In 2000-2002, she served on the Farmlands work group for the 2002 *State of The Nation's Ecosystems: Measuring the Lands, Waters, and Living Resources of the United States*.

Ozonoff, David M.

Boston University

Dr. David Ozonoff is Professor of Public Health and Chair Emeritus in the Department of Environmental Health at Boston University School of Public Health. He graduated with a B.S. in mathematics from the University of Wisconsin in 1962, from Cornell University Medical College with an M.D. degree in 1967 and from Johns Hopkins School of Hygiene and Public Health with an MPH degree in 1968. He spent one year as a Macy Fellow in the History of Science Department of Harvard University in 1975 and a year as a Mellon Fellow at MIT in 1976. His primary area of research is in environmental epidemiology, where he has conducted extensive studies of communities exposed to hazardous wastes and water contaminated with chlorinated ethylenes. He also works on new mathematical techniques for analyzing epidemiological data. He has been Director of the Boston University Superfund Basic Research Program for the last eight years. He is past-President of the Massachusetts Public Health Association, a Fellow of the Johns Hopkins Society of Scholars and a Fellow of the Collegium Ramazzinni. Dr. Ozonoff has served on numerous Federal Advisory Committees, including the Advisory Committee for Energy Related Epidemiological Research to the Secretary of Health and Human Services, the Disinfection By-Products Negotiated/Microbial Contamination Rulemaking Committee to the U.S. EPA, several environmentally-related National Research Council committees and National Institutes of Health grant review committees. He is a Member of the Massachusetts Bioterrorism Preparedness and Response Program Advisory Committee, February 2002 - present. He is on the External Advisory Committees of the Harvard Environmental Health Sciences Center, and the Harvard School of Public Health Environmental Statistics Program, as well as advisory committees of the American Water Works Association Research Foundation and advisory committees on environmental matters to state and local governments.

Reddy, Ramesh

University of Florida

Dr. Ramesh Reddy is Graduate Research Professor and Chair, Soil and Water Science Department, University of Florida. Dr. Reddy received a B.S. in agriculture (1965) and an M.S. in agronomy and soil science (1967) from A.P. Agricultural University, and a Ph.D. in agronomy and soil science from Louisiana State University (1976). Dr. Reddy's areas of expertise and research include: biogeochemistry, wetlands and aquatic systems, soil and water quality, and ecosystem restoration. Dr. Reddy's recent research has included contributions in the following areas: 1) determination of the importance of biogeochemical processes on water quality in wetlands and aquatic systems; 2) using historical dating techniques and spatial nutrient storage in soils to investigate phosphorus enrichment in the Everglades; 3) investigating the role of biotic and abiotic uptake of phosphorus by calcareous periphyton mats in the water column and its regulation in maintaining low phosphorus concentration in the water column of the Everglades; 4) conducting work to estimate the long-term phosphorus assimilation capacity of wetlands and streams; 5) research on shallow lakes to investigate internal phosphorus flux from bottom sediments; 6) evaluating nutrient/contaminant impacts in wetlands and aquatic systems; 7) developing the linkage between microbial diversity and activities in wetlands, and identifying molecular level biogeochemical indicators for evaluating wetland ecosystem recovery; 8) identifying biogeochemical indicators to evaluate pollutant impacts in wetlands and aquatic systems; and 9) developing tools to extrapolate process-level information for use in restoration and management of wetlands and aquatic systems. Dr. Reddy has published more than 300 refereed journal articles and book chapters, and edited 5 books. He is a Highly Cited Researcher - <http://www.isihighlycited.com/> in the ecology and environment category (one or the top 200 worldwide). Dr. Reddy has served on numerous advisory committees. He is a member of the U.S. National Committee on Soil Science of the National Academy of Sciences. He is a member of the U.S. EPA committee on developing nutrient criteria for wetlands. He has served on the following editorial advisory boards: Associate Editor and member of the Editorial Board, *Journal of Environmental Quality* (1985 – 1990, 1994 – 1996); Associate Editor, *Wetlands Ecology and Management* (1988 – 2000); Editorial Board, *Critical Reviews in Environmental Science and Technology* (1992 – present), Editorial Board, *Nutrient cycling in Agroecosystems* (1999 – present). Dr. Reddy's select awards and honors include: University of Florida Doctoral Dissertation Advisory/Mentoring Award (2005); Fellow, World Innovation Foundation (2004); Member, U.S. National Committee, National Academy of Sciences (2003 – 2007); Environmental Quality Research Award, American Society of Agronomy (2002); Sigma Xi Senior Faculty Research Award (2002); Soil Science Applied Research Award, Soil Science Society of America (2001); Fellow, American Association for the Advancement of Science (2001); Florida Research Foundation Professor (1999-2002); Appointed Graduate Research Professor -1993-to date; Fellow - Soil Science Society of America (1988); Fellow - American Society of Agronomy (1988).

Rodewald, Amanda

The Ohio State University

Dr. Amanda Rodewald is an Associate Professor of Wildlife Ecology in the School of Environment and Natural Resources at The Ohio State University. She received a B.S. in Wildlife Biology from The University of Montana, an M.S. in Zoology from The University of Arkansas, and a Ph.D. in Ecology from The Pennsylvania State University. Dr. Rodewald's research program seeks to understand the mechanisms guiding landscape-scale responses of animal communities to anthropogenic disturbances, which requires her to work at multiple spatial scales and across multiple levels of biological organization. As such, her research touches on a variety of sub-disciplines, including conservation biology, landscape ecology, population demography, community ecology, behavioral ecology, and ecological restoration. Since 2000, Dr. Rodewald has generated more than \$5 million in research funding from a variety of federal and state agencies as well as non-profit organizations. She has published over 40 scientific papers in a broad range of journals including *Ecology*, *Ecological Applications*, *Biological Conservation*, *Biological Invasions*, and *Restoration Ecology*. Dr. Rodewald serves as an Associate Editor for *The Auk*, a leading ornithological journal, has served as an Associate Editor for the *Journal of Wildlife Management*, and is a reviewer for 20 scientific journals. In addition, Dr. Rodewald contributes to the national and state-level environmental decision-making process in her ad-hoc advisory and panel roles with National Science Foundation, U.S. Department of Agriculture Forest Service, U.S. Fish and Wildlife Service, Ohio Department of Natural Resources, and North American Bird Conservation Initiatives.

Sanders, James

Skidaway Institute of Oceanography

Dr. James Sanders is Director of the Skidaway Institute of Oceanography, a campus of the University System of Georgia. He received his B.S. from Duke University in Zoology and his Ph.D. from the University of North Carolina in 1978 in Marine Sciences, then was a postdoctoral investigator at Woods Hole Oceanographic Institution. Prior to his arrival in Savannah in 2001, Dr. Sanders was on the faculty and served as Director of the Academy of Natural Sciences' Estuarine Research Center in Maryland from 1981 to 1999, then was Chairman of the Department of Ocean, Earth and Atmospheric Sciences at Old Dominion University in Virginia. Dr. Sanders is known for his interests within the area of nutrient and trace element biogeochemistry: how trace elements are transported through coastal zones, transformed by chemical and biological reactions during transport, and how they can impact aquatic ecosystems. He serves as a consultant to federal and state science agencies and industrial groups in the U.S. and Europe. He is a member of numerous scientific societies, is President of the National Association of Marine Laboratories and a Trustee of the Consortium for Ocean Leadership. He is the author of over 75 scientific publications.

Sandquist, Gary M.

University of Utah

Dr. Gary M. Sandquist is currently a Professor of Mechanical Engineering and former Director of the Graduate Nuclear Engineering Program at the University of Utah. Previously he was a Distinguished Visiting Professor in Physics and Civil and Mechanical Engineering Departments at the U.S. Military Academy at West Point, where he supported and trained Army personnel in Functional Area 52 activities (Nuclear operations). He has a B.S. in Mechanical Engineering, M.S. in Engineering Science, Ph.D. in Mechanical and Nuclear Engineering, MBA, was a Post Doctoral Fellow at MIT, and served a Sabbatical at ben Gurion University in Beer Sheva, Israel. He is a Registered Professional Engineer in Utah and New York (Mechanical) and California (Nuclear), a Board Certified Health Physicist, a Diplomate in Environmental Engineering, a Certified Quality Auditor, and a retired U.S. Naval Reserve Commander with an Intelligence Designator. As Reactor Supervisor and U.S. Nuclear Regulatory Commission (NRC) Licensed Senior Reactor Operator for a TRIGA research reactor, he served as a short mission expert in nuclear science and safeguards for the International Atomic Energy Agency (IAEA) and as Technical Training Director for the joint U.S. Department of Energy (DOE), EPA, DRI Community Radiation Monitoring Program at the Nevada Test Site. Dr. Sandquist's principal scientific interests include risk assessment; radiation transport, analytical detection and measurement; assessment and decontamination of chemical and radioactive hazards; design and execution of characterization and final status surveys using Multi-Agency Site Survey and Investigation Manual (MARSSIM); and design and operation of heating, ventilation and air-conditioning (HVAC) systems. He is a Fellow of the American Society of Mechanical Engineering (ASME) and American Nuclear Society (QUANS). He has authored or co-authored 500 publications including 5 books and book chapters, 180 refereed papers, 325 technical reports, developed 17 major technical computer codes and participated in over 200 technical meetings, conferences, workshops and government hearings.

Scheff, Peter

University of Illinois at Chicago

Dr. Peter Scheff is Professor Emeritus, Environmental and Occupational Health Sciences, University of Illinois at Chicago. He received his Ph.D. in Environmental and Occupational Health Sciences from the University of Illinois at Chicago, School of Public Health in 1983 and his M.S. in Environmental Health Sciences from the University of Illinois at the Medical Center, School of Public Health in 1978. Dr. Scheff's areas of expertise include: air quality management, industrial hygiene, environmental modeling, and exposure assessment. His research is focused on the management of urban air quality including the development of observational models for reactive organic gases, particulate matter, and ozone; characterization, evaluation and control of the indoor environment; and the health effects of exposure to ambient air pollution. In addition to his teaching and research activities, he has served as the Director of the Industrial Hygiene Program at UIC and Director of the U.S. EPA Air Pollution Training Institute Area Training Center in Chicago.

Schwartz, Mark

University of California, Davis

Dr. Mark Schwartz is a Professor in the Department of Environmental Science and Policy, College of Agriculture, University of California, Davis. He holds a B.A. Biology and Chemistry from College of St. Thomas (St. Paul, MN); Master of Science in Ecology from the University of Minnesota; and Ph.D. in Biology from Florida State University. His current research is focused on five areas: (1) the potential impact of global warming on the distribution of trees in the eastern U.S.; (2) taxonomic and geographic patterns in the distribution of rare plants and how this affects conservation strategies; (3) economic models of mutualism; (4) the interactions among fire, native herbivores and cattle on Miombo vegetation at the landscape scale; and (5) planning and implementing effective floodplain restoration in the Cosumnes River ecosystem. He spent the 2001-2002 academic year as a program manager at the National Science Foundation (Ecosystems program and Biocomplexity in the Environment). He serves on the editorial boards of *Ecology Letters* and *Biological Conservation*. He serves on the Board of Governors for the Society of Conservation Biology and is chair of the Graduate Group in Ecology at University of California, Davis.

Snyder, Shane

Southern Nevada Water Authority

Dr. Shane Snyder is the Research and Development Project Manager for the Southern Nevada Water Authority (SNWA). SNWA serves the regional water needs for more than 2,000,000 permanent residents and more than 40,000,000 visitors annually. Dr. Snyder also serves as an Associate Adjunct Professor of Chemistry at the University of Nevada, Las Vegas. He holds a B.A. in Chemistry from Thiel College and a Ph.D. in Zoology and Environmental Toxicology from Michigan State University. Dr. Snyder's research has focused on the aqueous fate, transport, and treatment of emerging contaminants, such as endocrine disrupting compounds, pharmaceuticals, perchlorate, perfluorinated organics, and novel disinfection byproducts. He has published more than 60 manuscripts and book chapters on the detection and treatment of endocrine disruptors and pharmaceuticals in water. Dr. Snyder served two terms on U.S. EPA Advisory Committees for the Endocrine Disruptor Screening Program and has served on two expert panels for U.S. EPA's Candidate Contaminant List III. He also is a member of the Research Advisory Council of the WaterReuse Foundation and is a member of the American Water Works Association's Board of Trustees. Dr. Snyder is the Principal Investigator of several national projects to address the occurrence, fate, and relevance of endocrine disruptors and pharmaceuticals in U.S. drinking water. In April of 2008, Dr. Snyder testified before the U.S. Senate Committee on Environment and Public Works for a subcommittee hearing entitled "Pharmaceuticals in the Nation's Water: Assessing Potential Risks and Actions to Address the Issue."

Steinman, Alan

Grand Valley State University

Dr. Alan Steinman is currently Director of the Annis Water Resources Institute at Grand Valley State University. He oversees research, educational activities, and outreach at the Institute, and maintains an active research program dealing with impacts of nonpoint source pollution, ecosystem restoration of the Great Lakes, and valuation of ecosystem services in west Michigan. Prior to joining AWRI, Dr. Steinman was the Director of the Okeechobee Restoration Program at the South Florida Water Management District. Dr. Steinman received his Ph.D. in Botany and Aquatic Ecology at Oregon State University and did his postdoctoral research at Oak Ridge National Laboratory in nutrient cycling and disturbance ecology. Dr. Steinman's expertise includes restoration ecology, nutrient cycling, periphyton ecology, and aquatic metabolism. Current professional service includes associate editor of two scientific journals, the International Joint Commission's Upper Great Lakes Water Level Study, the federal Sustainable Water Resources Roundtable, and US EPA's Climate Change Effects on Water Quality STAR panel. Recent federal service includes the National Science Foundation's Ecosystems Panel, Science Advisory Boards for the U.S. Geological Survey's contaminants program, Minnesota Sea Grant, and U.S. EPA's Reports on the Environment – 2003 and 2008. In Michigan, Dr. Steinman has served on the State's Phosphorus Management Policy Advisory Committee and the Groundwater Conservation Advisory Council, where he chaired the sustainability subcommittee. Regionally, he serves on the Green Infrastructure Leadership Council for the West Michigan Strategic Alliance and the Board of Directors of the Land Conservancy of West Michigan. He has published over 100 peer-reviewed scientific articles and book chapters and given expert testimony before the U.S. Congress and Michigan State Senate. His professional awards include Outstanding Reviewer Award from *Journal of Environmental Quality*, Environmental Excellence Award from the Muskegon Area Environmental Coordinating Council, Public Health Partnership Award from the Michigan Association for Local Public Health, and as part of the Everglades Restudy Team both the Joan Hodges Queneau Palladium Medal from the National Audubon Society and the Outstanding Planning Achievement Award from U.S. Army Corps of Engineers.

Suen, Chi-Yeung John

California State University, Fresno

Dr. John Suen is a Professor of Geology at California State University (CSU), Fresno and Chief of Hydrogeology Studies at the California Water Institute. He has served as Chair of the Department of Earth and Environmental Sciences, and founding Program Coordinator of the University of California at Riverside - CSU Fresno Joint B.S. Degree Program in Environmental Sciences. He received a Bachelor of Science degree with Honors from McGill University in Canada, a Doctor of Science degree from the Massachusetts Institute of Technology, and was a postdoctoral fellow at the University of California, San Diego. Prior to joining the faculty of CSU Fresno, he also served as adjunct faculty at the State University of New York at Stony Brook, and California State University, Hayward. Dr. Suen was Scientist at Brookhaven National Laboratory on Long Island, New York, where he worked as a technical consultant for the U.S. Nuclear Regulatory Commission's Low-Level Waste Source Term Project, developing hydrogeologic models for calculation of radioisotope transport in the subsurface. He has published extensively in this field. He was also on the research staff of Gulf Oil Canada and Sohio Petroleum Company (now BP America), where he worked on heavy/enhanced oil recovery. Dr. Suen's current research projects include the study of contaminant hydrology in the Central Valley of California, and hydrology of fractured rocks. Currently, his research interest focuses on the application of isotopic data in hydrology, such as studying nitrate contamination in groundwater using nitrogen and oxygen isotopes as a source indicator in agricultural environments. He has conducted research projects for the Regional Water Quality Control Board (Region 5) and the Department of Pesticide Regulation of the California EPA, and is developing a fracture hydrology project with the Sierra Resource Conservation District. In past years, Dr. Suen has also served on a number of advisory capacities, including as a member of the expert ground water panel for the cities of San Francisco and Daly City, on the board of directors for the Bay Institute of San Francisco (a 501(c)3 environmental organization), on the Commission on the Urban Agenda of the National Association of State Universities and Land-Grant Colleges (NASULGC), on the Kings River Groundwater Basin Committee of the State Regional Water Quality Control Board, and on the Curriculum Advisory Panel of Madera College Center, College of Sequoia.

Suh, Helen

Harvard University

Dr. Helen Suh is an Associate Professor of Exposure Assessment and Environmental Chemistry at the Harvard School of Public Health. Dr. Suh is an expert in air pollution exposure assessment, measurements, and environmental epidemiology. She is the Co-Principal Investigator of the Harvard-EPA Particle Health Effects Center study of the Normative Aging Study cohort and is the Principal Investigator of the Exposure Core of an NIEHS-funded Program Project on Particle Exposures and Cardiovascular Health Effects. Dr. Suh has also been the Principal Investigator of numerous exposure and health studies, including those to characterize multi-pollutant exposures, to examine cardiovascular health effects from air pollution, and to develop GIS-based spatial smoothing models to estimate chronic particulate exposures. She is a member of the U.S. EPA Clean Air Scientific Advisory Committee Panel for Particulate Matter Review and was previously a member of the National Academy of Science Committee on Estimating Mortality Risk Reduction Benefits From Decreasing Tropospheric Ozone Exposure. Dr. Suh has performed advisory work in environmental sciences for numerous international, national, and local organizations. She is a member of the Harvard-Cyprus International Institute and the Cyprus International Institute, which are sponsored by Harvard University and the Cyprus government to foster research and teaching in the surrounding region, including the Middle East, Africa, and Europe. Dr. Suh is also a scientific advisor to the Korean Advanced Institute of Science and Technology in Daejeon, Korea. Dr. Suh received a S.B. in biology from the Massachusetts Institute of Technology, and an M.S. and Sc.D. in environmental health sciences from the Harvard School of Public Health.

Suuberg, Eric

Brown University

Dr. Eric Suuberg received his Sc.D. in Chemical Engineering from M.I.T. in 1978. His research interests include: vapor intrusion and characterization of contaminated/ hazardous waste sites; reactions of oxidizing gases with carbons and production of activated carbons; pyrolysis and combustion of fuels, biomass and polymers; vapor pressures and thermodynamics of high molecular weight organics; reuse of byproduct materials (e.g., coal fly ash, scrap tires); and the macromolecular structure and chemistry of coals. Currently the Suuberg laboratory's interests include the vapor pressures of high molecular weight organics and pollutants, and the thermodynamics of complex mixtures of environmental concern. Dr. Suuberg serves as co-Director of Brown's Superfund Basic Research Program. This program includes a new effort at understanding the phenomenon of vapor intrusion, in which contaminant vapors transport through soil and enter structures built atop or near contaminated sites. His group is offering modeling tools and guidance to regulators interested in this phenomenon. He has been involved in research on the properties, chemistry and combustion of coal for almost 30 years. He continues to be interested in problems related to energy. He has been particularly interested in the properties of tarry products of combustion and pyrolysis, and has served as an expert witness in former manufactured gas plant contaminated site litigation.

Taylor, Michael

New Zealand Ministry of Health

Dr. Michael Taylor has recently retired and was previously Senior Advisor on Environment, Physical Environment, Communicable Disease, and Environmental Health Policy in the New Zealand Public Health Directorate, Ministry of Health, New Zealand (NZ). He is the architect of New Zealand's drinking-water legislation, drinking-water standards and drinking-water regulatory policy. He holds a Ph.D. in mycological chemistry from the London School of Hygiene and Tropical Medicine, University of London. He has had a wide ranging career as a chemical oceanographer (UK and Norwegian Fisheries Laboratories); a scientific diving instructor, chief chemist in the drinking-water and sewage treatment laboratories at the Auckland (NZ) Regional Authority, Director of Research and Surveys servicing the NZ National Water and Soil Conservation Authority, a Chief Director of the NZ Department of Scientific and Industrial Research, (in charge of the Soil, Geology, Botany, Geophysics, Fresh and Marine Water Divisions) and an environmental health adviser to the Ministry of Health. For the last eight years he has focused his efforts on drinking-water quality management because the complexity of the drinking-water quality management situation in New Zealand demanded full time attention. He was made a Companion of the Queens Service Order in recognition of this work. Dr. Taylor has served on several advisory committees for the World Meteorological Organization and World Health Organization (WHO), and is currently providing technical servicing to an aid programme run by WHO and SOPAC (Pacific Applied Geoscience Commission) in drinking water quality management for the Pacific Islands countries.

Thorne, Peter

University of Iowa

Dr. Peter S. Thorne is Professor of Toxicology and Environmental Health in the University of Iowa, College of Public Health. He also holds a secondary appointment as Professor of Environmental Engineering. He received his MSc in biomedical engineering and Ph.D. in toxicology from the University of Wisconsin-Madison in 1978 and 1980, respectively, and did his post-doctoral training in immunotoxicology at the University of Pittsburgh from 1984-1986. He is Director of the Environmental Health Sciences Research Center, Director of the University of Iowa Pulmonary Toxicology Facility, and leader of a productive research laboratory engaged in studies of environmental risk factors for asthma, inflammatory lung diseases, endotoxin- and glucan-induced immunomodulation, and novel methodology for exposure assessment. His research is presented in 150 peer-reviewed publications and book chapters. He teaches graduate level courses on environmental health, human toxicology, and research methods in biological agents. He has served on a variety of editorial and review boards for scientific journals, government agencies, and academia and on the National Advisory Environmental Health Sciences Council for the U.S. National Institutes of Health.

von Stackelberg, Katherine

Harvard Center for Risk Analysis

Dr. Katherine von Stackelberg specializes in developing risk-based modeling tools to support environmental decision-making. Much of her work has focused on incorporating quantitative uncertainty analysis (e.g., analytical, probabilistic, and fuzzy methods) into the risk assessment process, and she has been at the forefront of the effort to promote uncertainty analysis and methods for communicating uncertainty to support environmental decision-making. Dr. von Stackelberg was the technical lead for the development of the probabilistic aquatic bioaccumulation model used to evaluate remedial alternatives for the Hudson River Superfund Site, and she was the technical lead for the ecological risk assessment, which incorporated a joint probability model for predicting potential effects. Under a Phase I SBIR grant, she led the effort to develop a prototype Bayesian hierarchical model for predicting the potential for ecological effects associated with exposures to unique military compounds (e.g., smokes and obscurants, energetics) for which toxicity is poorly characterized and/or highly uncertain. She is currently leading the effort to develop a probabilistic decision making framework for evaluating the suitability of disposal of dredged materials at the Historic Area Remediation Site (HARS) in New York – New Jersey Harbor. She is an experienced modeler, and served as technical lead for the development of several aquatic food web models for the U.S. Army Corps of Engineers and U.S. EPA, including FishRand, FishRand-Migration, and TrophicTrace. An emerging focus area for Dr. von Stackelberg is developing tools and methods to support sustainable approaches to environmental decision-making, particularly in terms of economic benefits related to ecosystem services. She is interested in approaches and tools for quantifying changes in ecosystem services, and identifying relationships between ecosystem services and benefits with the goal of integrating economics and risk assessment in order to better quantify the benefits of proposed risk reductions as a result of management or regulatory actions for use in cost-benefit, cost-effectiveness, and value of information analyses. Dr. von Stackelberg received an A.B. cum laude from Harvard College, and a Sc.M and Sc.D. from the Harvard School of Public Health in Environmental Science and Risk Management. She is a member of the Society for Risk Analysis, Society for Environmental Toxicology and Chemistry, Ecological Society of America, and the Association of Environmental and Resource Economists. She serves as peer reviewer for numerous journals, and is on the editorial board for *Risk Analysis*. Dr. von Stackelberg was recently appointed to the U.S. EPA Board of Scientific Counselors.

Vugia, Duc

California Department of Health Services

Dr. Duc J. Vugia, MD, MPH is Chief of the Infectious Diseases Branch at the California Department of Public Health. He received his medical degree from the University of California (UC) San Francisco. He was further trained in Internal Medicine and in Infectious Diseases at UC Irvine Medical Center and in epidemiology at UC Berkeley. He was a medical epidemiologist at the Centers for Disease Control and Prevention (CDC) where he investigated food borne and waterborne bacterial and parasitic infections. In California, Dr. Vugia manages statewide programs to monitor, investigate, prevent, and control general communicable diseases including food borne, waterborne, vector borne, and zoonotic diseases. Dr. Vugia has also been serving as co-director of the California Emerging Infections Program, a cooperative project involving the UC Berkeley School of Public Health, CDC, and selected California counties to address emerging infectious diseases. He has been an author or coauthor of more than 100 peer-reviewed scientific publications, including several on food borne and waterborne diseases.

Weathers, Kathleen

Cary Institute of Ecosystem Studies

Dr. Kathleen C. Weathers received her M.F.S. degree from Yale University in 1983 and her Ph.D. in Ecology from Rutgers University in 1993. She is currently a Senior Scientist at the Cary Institute of Ecosystem Studies (IES) in Millbrook, New York. Dr. Weathers has been involved in air pollution research since the mid-1980s. She has published widely, including significant papers on modeling the effects of landscape features on patterns of atmospheric deposition, tracking the response of terrestrial ecosystems to nitrogen pollution, and illuminating the ecological importance of fog. Much of her research is focused on understanding atmospheric influences and controls on ecosystem processes and biogeochemical cycles in heterogeneous landscapes. Currently, she is working with colleagues and students in California, Chile, Mexico, New York, New England, and National Parks in the eastern U.S. Dr. Weathers has been elected a fellow of the American Association for the Advancement of Science (AAAS), and is a member of the Public Affairs Committee of the Ecological Society of America (ESA). She has been a member of various National Science Foundation and American Association of University Women (AAUW) panels, of the EPA's CASAC NO_x and SO_x Review Panel as well National Academy of Sciences/Transportation Research Board (NAS/TRB) Committee to evaluate the Congestion Mitigation Air Quality (CMAQ/TEA-21) program. She has co-led workshops and conferences on such topics as the ecological effects of air pollution; strategies for successfully bridging science, policy and management; and linking science, education and outreach.

Weisberg, Stephen

Southern California Water Research Project Authority

Dr. Stephen Weisberg is Executive Director of the Southern California Coastal Water Research Project Authority, which is a research consortium formed by the leading water quality management agencies in California to ensure a solid scientific foundation for their water quality management. Dr. Weisberg received a Ph.D. in biology from the University of Delaware in 1981 and a B.G.S. in Biology from the University of Michigan in 1974. Dr. Weisberg is a national leader in development of aquatic biological monitoring programs, having established southern California's regional marine monitoring program, led the benthic component of the Chesapeake Bay monitoring program, and helped establish U.S. EPA's Environmental Monitoring and Assessment Program. He presently implements the National Oceanic and Atmospheric Administration's Mussel Watch program in California and serves on California's Water Quality Monitoring Council, where he is California's liaison with EPA for preparation of their National Coastal Condition Report. Dr. Weisberg also served on the Coasts and Oceans Workgroup for the Heinz Center State of the Nation's Ecosystems Report. Dr. Weisberg is experienced in linking the needs of the management community with science. He has experience translating science into management action and brings with him the management perspectives he gains through interactions with his multiple member agencies. Dr. Weisberg also has considerable experience serving on advisory bodies at both State and Federal level, bringing perspective of how such committees can be most effective. At the State level, he presently serves on California Ocean Protection Council Scientific Advisory Panel, the California Clean Beach Task Force, and Governing Boards for the California Ocean Science Trust and the Southern California Coastal Ocean Observing System. At the federal level, he has served on the Ocean Research and Resources Advisory Panel, U.S. EPA Board of Scientific Counselors Water Quality Committee, the National Academy of Sciences Panel on Indicators of Waterborne Pathogens, and the Alliance for Coastal Technologies Stakeholders Council.

Weis, Judith

Rutgers University

Dr. Judith Weis is a Professor, Department of Biological Sciences, Rutgers University, Newark NJ. She previously served as Associate Dean for Academic Affairs at the University. She also has served as American Association for the Advancement of Science (AAAS) Congressional Science Fellow with the Senate Environment and Public Works Committee, and Program Director at the National Science Foundation. She has been a visiting scientist at EPA, both at the research lab at Gulf Breeze, Florida and in the Office of Water (Ocean and Coastal Protection Division). She received her bachelor's degree from Cornell University, and M.S. and Ph.D. from New York University. Dr. Weis' research has focused on estuarine ecology and ecotoxicology. She has published about 200 refereed papers, focusing mainly on stresses in the estuarine environment and their effects on organisms, populations and communities. Particular areas of focus have been effects of metal contaminants on growth, development, and behavior; development of tolerance to contaminants in populations living in contaminated areas; effects of parasites on behavior and ecology of fish; interactions of invasive and native crab species; effects of invasive marsh plants on estuarine ecology and on fate of metal contaminants. Much of her research has been focused on estuaries in the New York/New Jersey Harbor area. Dr. Weis has served on numerous advisory committees and has held leadership positions including: Boards of Directors of the Society of Environmental Toxicology and Chemistry (SETAC), Association for Women in Science (AWIS) and the American Institute of Biological Sciences (AIBS); Chair of the Biology Section of American Association for the Advancement of Science (AAAS) in 2000; and President of AIBS in 2001. She is a fellow of the American Association for the Advancement of Science (AAAS). She has served on advisory committees for the U.S. EPA including: Scientific and Technical Achievement Awards (STAA) and the initial review committee for the Report on the Environment (ROE) for the U.S. EPA Science Advisory Board, and the Endocrine Disruptors Screening and Testing Advisory Committee – EDSTAC). She has served on advisory committees for the National Oceanic and Atmospheric Administration (NOAA). She has been a member of the Marine Board of the National Research Council, and currently serves on the National Sea Grant Review Panel of NOAA. Dr. Weis has previously been on the Editorial Boards of *Transactions of the American Fisheries Society* and *Bulletin of Environmental Contamination and Toxicology* (BECT) and was Associate Editor of BECT. She is currently on the Editorial Board of *BioScience*. Dr. Weis' sources of recent grant support include: U.S. Geological Survey - Water Resources Research Program; National Science Foundation - Division of Environmental Biology; NOAA, and Meadowlands Environmental Research Institute.

Wilson, Barry

University of California

Dr. Barry Wilson is a professor in the College of Agriculture at the University of California Davis (UCD). Dr. Wilson received his B.A. degree at the University of Chicago, a B.S. and M.S. in Biology at the Illinois Institute of Technology, and a Ph.D. in Zoology from University of California at Los Angeles in 1962. He has been a member of the College of Agriculture at UCD since then. His areas of expertise include neurotoxicology and ecotoxicology. Current research focuses on organophosphate induced neuropathis including Gulf War syndrome, standardization of clinical cholinesterase testing, impact of pesticides on the environment, impact of pesticides on development of cells, birds, fish and mammals. Dr. Wilson serves on several California EPA pesticide advisory committees, has just finished a term on the UCD Graduate Council. He is an active member of the Society of Toxicology (SOT) and the Society for Environmental Toxicology and Chemistry (SETAC), both locally and nationally. He is a member of the National Institute for Environmental Health Sciences (NIEHS) supported UCD Center for Environmental Health Sciences and the National Institute for Occupational Safety and Health (NIOSH) UCD Center for Agricultural Health and Safety. Additional grant support is from Department of Defense (DOD) and several California commodity groups.